Did Hobab, Moses' father-in-law, stay with Israel?

Hobab was a relative of Moses' wife Zipporah (Num 10:29; Judg 4:11).

The Lexham Bible Dictionary writes:

...Judges 1:16 states that the Kenites—the descendants of Moses' father-in-law—settled with the people of Judah. This supports the account given in Num 10:29, in which Moses invites Hobab to accompany the Israelites through the desert. The Kenites were among the Israelites later—this story explains how they came to join them.

The Lord guided the Israelites through the wilderness.

Dale Launderville wrote:

...[E]vidence that Hobab consented to guide the Israelites may be present in Judg 1:16 which states that the Kenites and Judahites together went up and settled in the wilderness of Judah near Arad. If Hobab was the leader of the Kenites at the time of this concerted action, then he probably forged an alliance between the Kenites and the Judahites (AIR, 307). The absence of a response by Hobab in Num 10:29–32 to Moses' invitation to guide the Israelites may be a consequence of the tradition's emphasizing the divine guidance of the Lord from the Ark (Num 10:33–34) and its downplaying of the human guidance which Hobab would have provided....¹

¹ Launderville, D. F. (1992). Hobab (Person). In D. N. Freedman (Ed.), The Anchor Yale Bible Dictionary (Vol. 3, pp. 234–235). Doubleday.